

Applicants: Ron S. Israeli, et al.
Serial No.: 08/466,381
Filed : June 6, 1995
Page 2

to 37 C.F.R. 1.121(b) by inserting the underlined material and deleting the bracketed material as follows:

D₁

--90. (2X Amended) A method of detecting micrometastatic prostate tumor cells of a subject, comprising a) obtaining a suitable sample; b) extracting [nucleic acid molecules] mRNA from the sample; c) contacting the mRNA with reverse transcriptase under suitable conditions to obtain cDNA; d) contacting the [nucleic acid molecules] cDNA [under hybridizing conditions] with a labeled nucleic acid [molecule of] probe which is at least 15 nucleotides in length which nucleotides have a sequence complementary to [capable of specifically hybridizing with] a nucleic acid [molecule] having the sequence set forth in SEQ ID NO:1 [encoding a prostate specific membrane antigen having the amino acid sequence as set forth in SEQ ID NO. 2]; [d)] e) detecting the labeled nucleic acid molecule, thereby detecting micrometastatic prostate tumor cells of the subject.--

--91. (Amended) A method of detecting micrometastatic prostate tumor cells of a subject, comprising a) obtaining a suitable sample; b) extracting [nucleic acid molecules] mRNA from the sample; c) contacting the mRNA with reverse transcriptase under suitable conditions to obtain cDNA; d) generating a double stranded DNA by generating a sequence complementary to the cDNA; e) contacting the DNA [the nucleic acid molecules under hybridizing conditions] with [a] one primer [which] having a sequence which is complementary [is capable of specifically hybridizing] to a nucleic acid [molecule] with the sequence as set forth in SEQ ID NO:1 and a second primer having a sequence set forth in SEQ ID NO:1 [encoding a prostate

Applicants: Ron S. Israeli, et al.
Serial No.: 08/466,381
Filed : June 6, 1995
Page 3

specific membrane antigen having the amino acid sequence as set forth in SEQ ID NO. 2]; [e)] f) amplifying the [nucleic acid molecules] DNA [to which the primer hybridizes to,] so as to obtain an amplification product; f) detecting the amplification product with a labeled probe, thereby detecting micrometastatic prostate tumor cells of the subject.--

--92. (Amended) A method of detecting in a sample the presence of a nucleic acid encoding a prostate specific membrane antigen which comprises: a) obtaining a suitable sample; b) extracting mRNA from the sample; c) contacting the mRNA with reverse transcriptase under suitable conditions to obtain a cDNA; d) generating a double stranded DNA by generating a sequence complementary to the the cDNA; e) contacting the [c]DNA [under hybridizing conditions] with [a] one primer having a sequence which is complementary to the sequence set forth in SEQ ID NO:1 and a second primer having a sequeence set forth in SEQ ID NO:1 [is capable of specifically hybridizing to a nucleic acid molecule encoding a prostate specific membrane antigen having the amino acid sequence as set forth in SEQ ID NO. 2]; [e)] f) amplifying [any c] the DNA [to which the primer hybridizes to is complementary,] so as to obtain an amplification product; [f)] g) detecting the amplification product with a labeled probe, thereby detecting the presence of the nucleic acid [molecule] encoding the prostate specific membrane antigen in the sample.--

--93. (Amended) The method of claim 90, 91, 92, 93, 94, 95 or 96 wherein the sample is blood, lymph nodes, bone marrow, semen or urine.--

Applicants: Ron S. Israeli, et al.
Serial No.: 08/466,381
Filed : June 6, 1995
Page 4

- 94. (New) A method of detecting micrometastatic prostate tumor cells of a subject, comprising a) obtaining a suitable sample; b) extracting mRNA from the sample; c) contacting the mRNA with a labeled nucleic acid probe which is at least 15 nucleotides in length and having a sequence set forth in SEQ ID NO:1; d) detecting the labeled nucleic acid molecule, thereby detecting micrometastatic prostate tumor cells of the subject.--
- 95. (New) A method of detecting micrometastatic prostate tumor cells of a subject, comprising a) obtaining a suitable sample; b) extracting mRNA from the sample; c) generating a DNA sequence complementary to the mRNA sequence to form a mRNA-DNA duplex d) contacting the duplex with one primer having the sequence set forth in SEQ ID NO: 1 and a second primer having a sequence complementary to the sequence set forth in SEQ ID NO: 1; e) amplifying the mRNA-DNA duplex so as to obtain an amplification product; f) detecting the amplification product with a labeled probe, thereby detecting micrometastatic prostate tumor cells of the subject.--
- 96. (New) A method of detecting in a sample the presence of a nucleic acid encoding a prostate specific membrane antigen which comprises: a) obtaining a suitable sample; b) extracting mRNA from the sample; c) generating a DNA sequence complementary to the mRNA sequence to form a mRNA-DNA duplex d) contacting the duplex with one primer having the sequence set forth in SEQ ID NO: 1 and a second primer having a sequence complementary to the sequence set forth in SEQ ID NO: 1; e) amplifying the mRNA-DNA duplex so as to obtain an amplification product; f) detecting the